Thick film thermal printhead
(with thermal historical control)

KD2004-DC72A

DC72 series has our own internally developed heat-history control function.
This product is best suited for applications which require 24 hours operation like factory production lines.

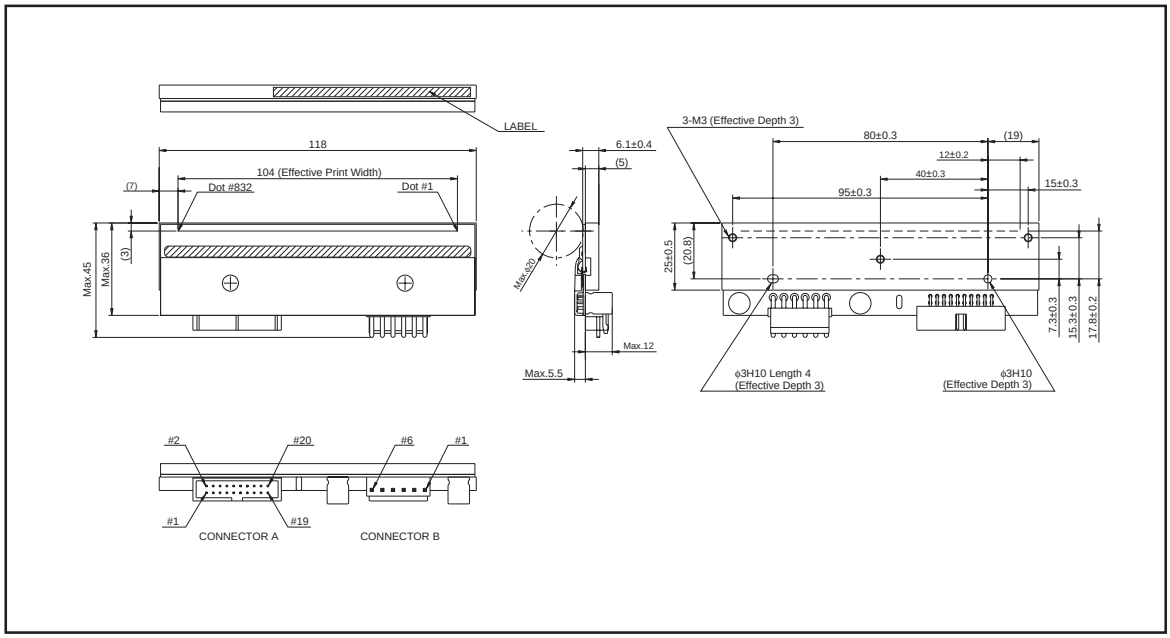
●Applications

High speed label printer
High speed bar code printer
High speed ticket printer
Various high speed terminal printers

●Features

1) Newly developed thick-film fast response thermal element and driver LSI with the function of thermal history control which is added the future history control are employed for this series. It is possible to print with super high speed of 10 inches / s or 250mm / s.
2) 150km life realized by attributing durable new protection film.
3) New partial glaze construction makes it compatible with the thermal transfer application.

●Dimensions (Unit : mm)



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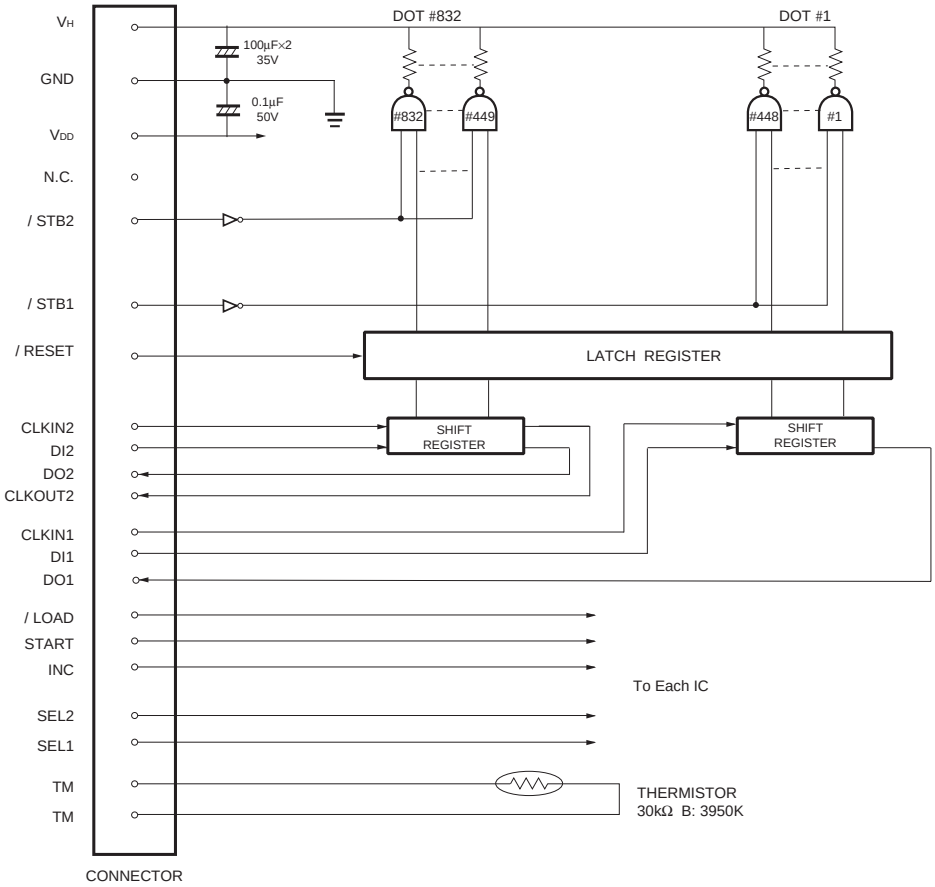
●Inner circuit



DI No.	DOT No.
DI2	832 to 449
DI1	448 to 1

/ STB No.	DOT No.
/ STB2	832 to 449
/ STB1	448 to 1

CLK No.	DOT No.
CLKIN2	832 to 449
CLKIN1	448 to 1

●Pin assignments

CONNECTOR A

No.	Circuit	No.	Circuit
1	V_{DD}	11	/ RESET
2	V_{DD}	12	START
3	SEL2	13	DO1
4	SEL1	14	DO2
5	CLKIN2 (CP)	15	TM
6	NC	16	TM
7	DI2	17	/ STB2
8	DI1	18	/ STB1
9	INC	19	CLKOUT2
10	/ LOAD	20	CLKIN1

CONNECTOR B

No.	Circuit
1	V_H (COM)
2	V_H (COM)
3	V_H (COM)
4	GND
5	GND
6	GND

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●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	104	mm
Dot pitch	–	0.125	mm
Total dot number	–	832	dots
Average resistance value	Rave	550	Ω
Applied voltage	V_H	24	V
Applied power	P_O	0.77	W/dot
Print cycle	SLT	0.490	ms
Maximum number of dots energized simultaneously	–	832	dots
Maximum clock frequency	–	8	MHz
Maximum roller diameter	–	ϕ20.0	mm
Running life / pulse life	–	$150/(1\times10^8)$	km/pulses
Operating temperature	–	5 to 45	°C

●Data sheets

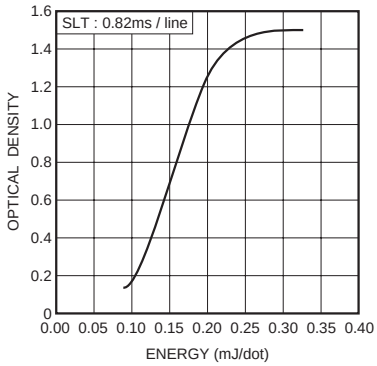

Fig.2 Representative density curve

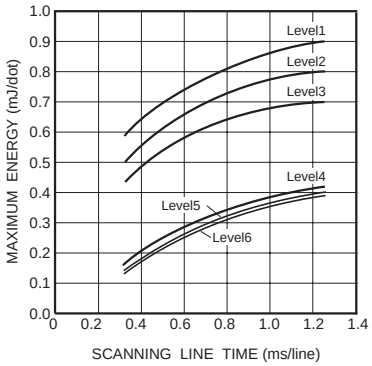

Fig.3 Maximum energy curve

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